Environmental Consequences

for

Project 1440-13/15-00
WIS 23 (Fond du Lac - Plymouth)
Fond du Lac and Sheboygan Counties

ENVIRONMENTAL CONSEQUENCES

This section describes the beneficial and adverse social, economic and environmental consequences of the No Build and reasonable Build Alternatives that underwent evaluation. Discussions are arranged by impact category, socio-economic, natural environment, physical environment, and cultural environment. Each category and its sub factors are briefly compared in an evaluation matrix and then in a detailed evaluation if necessary, as described below.

Discussions of the environmental consequences of the WIS 23 corridor alternatives are as follows:

- **Environmental Cost Matrix**

  This matrix provides a project overview of the environmental impacts and costs in a tabular form. The matrix includes construction and real estate costs, land acquisition estimates, farmland affected, residents affected, and natural environment issues such as wetlands, uplands, endangered species, archaeological/historical resources, and air and noise quality.

- **Corridor Environmental Evaluation Matrix**

  This matrix provides an overview of the alternates in a side-by-side comparison. The matrix is made up of four groups of factors, those being socioeconomic, natural environment, physical environment, and cultural environment. Specific factors are included within each group and are each designated by letter.

  In this section, the effect of each specific factor is defined as adverse, benefit, none, or not applicable for each corridor alternative. The environmental effect is summarized for each factor, and if further investigation is necessary, a detailed evaluation of the factor is found in the next section.

- **Detailed Factor Sheets**

  This section includes detailed evaluation of the specific environmental factors from the previous section. Some factors in the Evaluation Matrix are not applicable to the alternatives or are entirely discussed in the matrix, and are therefore not discussed further in the Factor Sheets.

The Wisconsin Department of Natural Resources (DNR), the U.S. Army Corps of Engineers (COE), the U.S. Fish & Wildlife Service (USF&WS), and the U.S. Environmental Protection Agency (EPA) have commented on this proposed project throughout the scoping process.

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES

The no build alternative includes irretrievable money, time, and personal hardship related to the high rate of personal injury and property damage accidents that are anticipated along the existing route. The cost, time, and frustration levels of decreasing levels of service for vehicular movement, operational energy expenditure tie to the inefficient facility, and the impairment of recreational, service, emergency, and business travel within the project area also create irretrievable commitments of resources.

The Build alternatives require irreversible commitments such as land acquisition of residential and commercial properties, wetland and farmland destruction, and access acquisition. Land converted from private use to public use displaces local tax revenues. Economic resources committed to the project include non-retrievable federal and state funding for construction and maintenance.

Also irretrievable resources such as fuel, labor and highway materials would be required to construct the build alternatives. Labor and materials are expected to remain in adequate supply. Construction energy expended to build the improved facility is considered irretrievable, however, the savings in operational

energy requirements on the more efficient facility should more than compensate for the construction energy usage.

The commitment of these resources is based upon the concept that the traveling public and local residents will benefit from the improved quality of Highway 23. Benefits, which are anticipated to outweigh the commitments of resources, will include improved accessibility and safety, greater facility capacity, and travel timesavings.

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RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Any build and no build action involve short-term and long-term trade offs. Short-term consequences include the more immediate impacts of the project. Long-term consequences relate to direct or secondary effects on future generations.

Short-term consequences include some increased localized noise, air and water pollution and some traffic delays during construction. These impacts are important to those experiencing them; however, the impacts do not have a lasting effect on the quality of the environment. Other short-term consequences involve additional fuel use by motorists and construction equipment during construction. Public funds will also be committed to build the facility.

The proposed improvement project does not have a precedent-setting nature for future projects. The alternatives being studied offer common congestion relief and safety improvements that follow accepted standards.

Factors such as highway improvement projects, sewer line extensions, the area's economic vitality, available land, land costs, housing supply, and zoning may induce development. Construction of the build alternate is not expected to solely stimulate substantial long-term secondary impacts, but could slightly accelerate secondary development that may occur regardless. The purpose of the improvement project is to add capacity to address existing traffic needs and to limit access on relocation to avert future highway improvements. Development will continue in this area for the same reason that it has been occurring for the last decade and due to the factors listed above.

The build alternatives will not foreclose future options. The proposed project is expected to provide acceptable capacity and safety for the foreseeable future. If additional capacity were required beyond what is provided by this project, other modal alternates or additional highway alternatives could still be pursued.

Long-term environmental impacts due to the build alternatives include the creation of new environmental effects such as new structures, a wetland mitigation site, loss of uplands, and additional right-of-way distances for wildlife crossings.

Long-term benefits realized from the build alternatives include improved convenience, safety, and energy use for those living in the project area and for those traveling through the area.

The No Build alternative avoids all of the short-term and localized construction impacts. Safety and mobility would continue to deteriorate under the No Build alternative, as capacity needs are not met. As traffic volumes increase in the future, the congestion and accident potential on the existing route will increase, thus reducing the long-term productivity of the area.

SECONDARY AND CUMULATIVE EFFECTS..

No known secondary and cumulative effects are expected to occur as a result of this project. The primary reason is because the transportation improvement will not change accessibility enough to generate changes in land use. Zoning, environmental regulations, amenities and the provision of infrastructure including sewer and water also affect land availability, demand and desirability for development.

The proposed improvements will result in minimal changes to access. Land will have the same degree of accessibility as it does today. Access will be restricted and controlled using State Statute 84.09 and 84.295. Access will be designated by type (residential, commercial, agricultural, etc.). Future requests for access can be denied. Access restrictions can affect how land adjacent to the highway develops.

The townships along the WIS 23 corridor have identified agricultural preservation as a comprehensive planning goal. Communities are likely to make land use decisions that achieve agricultural preservation. The agricultural preservation goal correlates with the existing character of land in the study area because the majority of land is non-irrigated cropland.

Communities that identify agricultural preservation as a comprehensive plan goal may face development pressure. The development pressure may result in communities making decisions inconsistent with agricultural preservation. This is not the case for communities in the study area due to several reasons. First, households seek locations that consider many factors including accessibility. Because accessibility to land remains unchanged, other factors must exist to result in agricultural land converting to residential development. Households consider proximity to work, school quality, access to stores, community services and other neighborhood amenities. Land in the study area is expected to remain at low development densities and largely agricultural because households' proximity to these factors is not as convenient as compared to households located in or near urban areas.

Second, businesses seek locations that maximize profit. This means that retailers must capitalize on market potential by locating in areas that have exposure and access to larger populations. Industries and offices consider many factors when choosing locations including proximity to labor. The rural characteristics of land in the study area are not desirable for most types of retail, office and industrial development.

In summary, secondary and cumulative effects are not expected to occur because the transportation improvement will not increase the accessibility of land and its attractiveness for development.